
From: Gray, David
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Subject: Harvey Response Update

Working together, the U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) continue to coordinate with local, state and federal officials to address the human health and environmental impacts of Hurricane Harvey and its aftermath, especially the water systems in the affected areas. TCEQ has 500 people assisting in response to this natural disaster and EPA has 185.

Sam and I want to thank everyone for helping with this effort!

EPA has begun mobilizing Community Liaisons to the designated disaster counties for Hurricane Harvey. The liaisons will assist the county emergency operation centers in disseminating pertinent information on post flood hazards to municipalities, school districts, and citizens. EPA has now been deployed to the FEMA JFO Joint Information Center in Austin and additional EPA response personnel are being assigned to Beaumont/Port Arthur. This area was previously inaccessible due to lack of facilities. EPA has begun coordination with environmental justice advocates from Texas and Louisiana to provide an update on the impacted areas. EPA has been closely coordinating with the U.S. Coast Guard on a large oil spill in the Houston area, and with city and county officials on a benzene plume identified near the Manchester neighborhood.

Drinking Water: To date, about 2,800 drinking water systems are potentially affected by Harvey have been contacted. Of those: 1,920 systems are fully operational, 168 have boil-water notices, and 50 are shut down. Both EPA and the TCEQ are contacting remaining systems to

gather updated information of their status. EPA and the TCEQ are working closely with the Texas National Guard, including the 6th Civil Support Team (supporting TCEQ in Corpus Christi), Arkansas National Guard, 61st Civil Support Team (supporting TCEQ in Houston), and the Texas State Guard Engineering Group, and other local and state agencies to continuously monitor water systems. Assistance teams are in the field working directly with system operators to expedite getting systems back to operational status.

Waste Water and Sewage: Currently, 903 of approximately 1,219 wastewater treatment plants are fully operational and 34 are inoperable in the affected counties. The agencies are aware that releases of wastewater from sanitary sewers are occurring, due to the historic flooding and are actively working to monitor facilities that have reported spills, conduct outreach and provide technical guidance to all other wastewater facilities in flood-impacted areas. EPA and TCEQ are working closely with the Texas National Guard, including the 6th Civil Support Team (supporting TCEQ in Corpus Christi), Arkansas National Guard, 61st Civil Support Team (supporting TCEQ in Houston), and the Texas State Guard Engineering Group, and other local and state agencies to continuously monitor wastewater systems. Assistance teams will be deployed to work directly with system operators to expedite getting systems back to operational status.

Flood Water: Water quality sampling will be focused on industrial facilities and hazardous waste sites. Floodwaters contain many hazards, including bacteria and other contaminants. Precautions should be taken by anyone involved in cleanup activities or any others who may be exposed to flood waters. These precautions include heeding all warnings from local and state authorities regarding safety advisories. In addition to the drowning hazards of wading, swimming, or driving in swift floodwaters, these waters can carry large objects that are not always readily visible that can cause injuries to those in the water. Other

potential hazards include downed power lines and possible injuries inflicted by animals displaced by the floodwaters.

Critical Water Infrastructure: The agencies are continuing to work closely with dams. The larger dams are full in many cases and may be releasing water; the structures are secure at this time. There are 340 high- and significant-hazard dams in the impacted areas, and TCEQ has been able to make contact with 200 of these dam owners. Of these 200, only five dams have been damaged or have failed. We have also been notified that three low-hazard dams have damage. TCEQ is continuing to contact dams to get status updates.

Superfund Sites: EPA and TCEQ continue to get updates about the status of specific sites from the parties responsible for ongoing cleanup of the sites. So far, TCEQ staff have assessed 12 of the 17 State Superfund sites in the affected areas. TCEQ anticipates completing the remaining 5 assessments by the end of the week depending on accessibility of those remaining sites.

EPA completed site assessments at 13 Superfund sites that have been flooded and/or experience possible damage to the storm. Of these sites, two (San Jacinto and U.S. Oil Recovery) require additional assessment efforts. Assessments of these sites will take several days to complete. The San Jacinto Waste Pits site has a temporary armored cap designed to prevent migration of hazardous material; some areas that rock been displaced and liner is exposed. The potential responsible party has mobilized heavy equipment and is placing rock on different places on the armored cap to repair the defensive surface. The liner is in place and functional so we don't have any indication that the underlying waste materials have been exposed. If we find a breach in the exposed liner, we direct the responsible party to collect samples to determine if any materials have been released. Crews continue to surveying portions of

the cap that are submerged and the EPA dive teams will survey the cap underwater when conditions allow. EPA is making plans for longer-term assessments at 41 Superfund sites in the impacted areas as the projects return to their normal remedial cleanups.

Air Quality Monitoring: One of the many preparations for Hurricane Harvey included EPA, TCEQ, and other monitoring entities temporarily shutting down several air monitoring stations from the greater Houston, Corpus Christi, and Beaumont areas. Since then, state and local authorities have been working to get the systems up and running again. As of Tuesday September 5, TCEQ air monitoring network is 100 percent operational in Corpus Christi, 88 percent in Houston, and 71 percent in Beaumont. The network is expected to be fully operational again by next week. Of the available air monitoring data collected from Aug. 24-Sept. 2, all measured concentrations were well below levels of health concern. Monitors are showing that air quality at this time is not concerning, and residents should not be concerned about air quality issues related to the effects of the storm.

An assessment by EPA of the Valero Refinery on Monday, September 5, 2017, confirmed that a tank at the facility did have a leak which occurred on August 26, 2017 from the Hurricane Harvey storm and flooding. EPA also confirmed Valero had taken action to respond to and repair the leak. Based on current site conditions including weather, repair actions by Valero, and air monitoring results, EPA's assessment could not confirm the tank was the source of the air release that led to complaints in the area immediately after the storm. EPA's air monitoring performed onsite and around the facility on September 5 does not indicate levels of concern for the community. EPA will continue air monitoring for additional sources in the area.

Fires at Arkema Facility in Crosby: The TCEQ has an open investigation into the Arkema incident that will include an evaluation of any impacts

due to the fires at the site. Additionally, after the final notifications are received, the TCEQ will evaluate the reported emissions events to determine compliance with applicable rules, permit provisions, and notification and reporting requirements. The TCEQ and Harris County Pollution Control are coordinating post-event monitoring, sampling, and complaint response activities. The U.S. Chemical Safety Board has initiated an investigation, and law enforcement continues to limit access to the Arkema plant in Crosby. For more information regarding Arkema, please visit <https://www.tceq.texas.gov/news/statement/statement-on-arkema-investigation>

Refineries/Fuel Waivers: In addition to gasoline waivers for 38 states and D.C. and diesel waivers for Texas, EPA signed three No Action Assurance letters on Sept. 1 to help address fuel shortages. NAA will help expedite the distribution of existing gasoline supplies to both Texas and Louisiana, while the refineries work to re-start and resume normal operations. The waivers and NAA letters are effective until Sept. 15 and should allow for the distribution in Texas of 10 million or more gallons of fuel to consumers. TCEQ is working with EPA to consider an extension to the gasoline waivers through October 1st.